

70. (new) The method as claimed in claim 30, wherein the plurality of components further comprises a filler, wherein the solids of the mixture has up to 40 volume % filler based on the total volume of the solids.
71. (new) The method as claimed in claim 56, wherein the binder is sodium silicate.
72. (new) A solid lubricant agglomerate produced by the method of any one of the preceding claims.
73. (new) A spheroidal form of the solid lubricant agglomerate of claim 72.
74. (new) The solid lubricant agglomerate of claim 72 or 73, blended or clad with a metal alloy.
75. (new) Thermal spraying of the composition of any of claims 72 to 74.

#### **REMARKS**

Reconsideration and allowance of the subject application are respectfully requested.

Claims 1 to 26 have been deleted, and New Claims 27 to 75, including independent claims 27, 44, and 57, are patentable over the cited references.

#### **Claims 27 to 43**

With respect to independent claim 27, independent claim 27 recites the following:

A method for producing solid lubricant agglomerates comprising:

admixing a plurality of components comprising particulate solid lubricant, an inorganic binder, and a liquid to produce a mixture having about 5 to 60 weight % solids based on the total weight of the mixture, wherein the ratio of the weight of

the solid lubricant being admixed to the weight of the binder being admixed is from about 19:1 to about 1:19;

drying the mixture to produce dry agglomerates; and

classifying the dry agglomerates by size, or milling and classifying the dry agglomerates by size, into an undersize particle fraction, an onsize particle fraction and an oversize particle fraction;

wherein the plurality of components further comprises the undersize particle fraction.

Notably, and amongst other things, unlike the invention as claimed in claim 27, none of the methods disclosed in the cited references contemplate recycling any undersize particle size fraction deriving from any classification step of any such methods. Since none of the cited references disclose this recycling aspect, the Applicant submits that claim 1 is patentable over the cited references.

With respect to claims 28 to 43, since claims 28 to 43 are directly or indirectly dependent on claim 1, and relying on the foregoing reasons given with respect to claim 27, the Applicant submits that claims 28 to 43 are patentable over the cited references.

#### Claims 44 to 56

With respect to independent claim 44, claim 44 recites the following:

A method for producing solid lubricant agglomerates comprising:

admixing particulate solid lubricant, an inorganic binder, and a liquid to produce a mixture having about 5 to 60 weight % solids based on the total weight of the mixture, wherein the ratio of the weight of the solid lubricant being admixed to the weight of the binder being admixed is from about 19:1 to about 1:19;

drying the mixture to produce dry agglomerates;

classifying the dry agglomerates by size, or milling and classifying the dry agglomerates by size, to obtain a desired particle size cut; and

causing the binder in the desired particle size cut to become non-dispersible in the liquid.

Unlike the invention as claimed in claim 44, none of the methods disclosed in the cited reference contemplate rendering non-dispersable any binder of any desired particle size cut produced from any such methods. The Applicant recognizes that the Examiner has taken the position that the binder disclosed in US'586 would inherently be non-dispersible. In response, the Applicant respectfully submits that the Examiner is incorrect, as the binder disclosed in that reference, namely an enamel frit, is certainly dispersible in water. Since none of the cited references disclose the aspect of rendering non-dispersable any binder of any desired particle size cut produced from methods disclosed in such cited references, the Applicant submits that claim 1 is patentable over the cited references.

With respect to claims 45 to 56, since claims 45 to 56 are directly or indirectly dependent on claim 44, and relying on the foregoing reasons given with respect to claim 44, the Applicant submits that claims 45 to 56 are patentable over the cited references.

#### Claims 57 to 75

With respect to independent claim 57, claim 57 recites the following:

A method for producing solid lubricant agglomerates comprising:

admixing particulate solid lubricant, an inorganic binder, and a liquid to produce a mixture having about 5 to 60 weight % solids based on the total weight of the mixture, wherein the ratio of the weight of the solid lubricant being admixed to the weight of the binder being admixed is from about 19:1 to about 1:19; and

drying the mixture to produce dry agglomerates.

wherein the binder is hydrous aluminium silicate that is configured to be stabilized at temperatures above 850°C in the dry agglomerates.

Unlike the invention as claimed in claim 57, none of the methods disclosed in the cited reference contemplate the binder recited in claim 57. The Applicant recognizes that the Examiner has taken the position that US'401 discloses using bentonite as the binder. In response, the Applicant respectfully submits that the the US'401 binder does not use bentonite in the concentration recited in claim 57. The Applicant submits that the binder disclosed in US'401 comprises a plurality of components, and that although one of those components may be bentonite, use of bentonite within the binder system of US'401 is merely as a compressibility enhancer, and that the compressibility enhancer is only a small part of such binder system. Certainly, the US'401 reference does not disclose the use of a binder system, wherein the binder is hydrous aluminium silicate, in the proportions recited in claim 57. Since none of the cited references disclose the use of a binder in the manner recited in claim 57, the Applicant submits that claim 57 is patentable over the cited references.

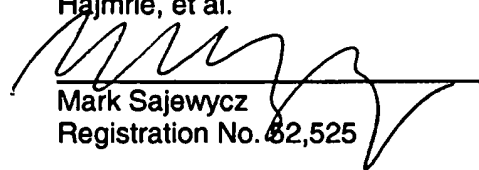
With respect to claims 58 to 75, since claims 58 to 75 are directly or indirectly dependent on claim 57, and relying on the foregoing reasons given with respect to claim 57, the Applicant submits that claims 58 to 75 are patentable over the cited references.

The Applicant respectfully requests favourable consideration, and an early Notice of Allowability. The Examiner is invited to contact Applicant's undersigned

attorney at his office in Toronto at (416) 862 5795 to resolve any remaining issues.

Respectfully submitted,

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